

Abstract

5 A GPRS Support Node (GGSN) has a plurality of slave data session control units (GTP-C/s) for controlling data sessions for Mobile Stations (MSs), a plurality of data sessions payload units (GTP-Us) for supporting routing of data sessions payloads, and a master data session control unit (GTP-C/m) dispatching
10 data sessions requests to GTP-C/s. When a GTP-C/s goes down, the GTP-C/m detects the failure, closes data sessions of the failed GTP-C/s and their corresponding accounting sessions. If a spare control unit is available, the GTP-C/m detects and activates the spare unit with the role and IP address of the failed GTP-C/s. When the GTP-C/m goes down, all the control units are notified, and
15 the least loaded unit is elected for replacing the GTP-C/m. The elected unit is a spare, non-utilized, GTP-C, or one of the slave GTP-C/s, which is activated as the GTP-C/m by rebuilding a GTP-C/m database with information received from remaining GTP-C/s.